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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/509,934	05/03/2000	ANDREAS STEINMEYER	SCH1747	6707
75	90 09/20/2005	EXAMINER		
	ITE ZELANO &BRAN	QAZI, SABIHA NAIM		
ARLINGTON COURTHOUSE PLAZA I 2200 CLARENDON BOULEVARD			ART UNIT	PAPER NUMBER
SUITE 1400			1616	
ARLINGTON, VA 22201			DATE MAILED: 09/20/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office A. C O	09/509,934	STEINMEYER ET AL.			
Office Action Summary	Examiner	Art Unit			
	Sabiha Qazi	1616			
<ul> <li>The MAILING DATE of this communication app</li> <li>Period for Reply</li> </ul>	ears on the cover sheet with the c	orrespondence address -			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on 20 Ju	ne 2005.				
	<del>_</del> <del></del>				
·	·				
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4)☐ Claim(s) <u>1-6,14,19,21-26,28-36,38 and 40-48</u> is	s/are pending in the application.				
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) <u>1-6, 14, 19, 21-26,28-36,38 and40-48</u> is/are allowed.					
6)☐ Claim(s) <u>8-11 and 15-18</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
The oath of declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents	<ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>				
2. Certified copies of the priority documents					
application from the International Bureau	application from the International Bureau (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)		•			
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  Notice of Informal Patent Application (PTO-152)					
Paper No(s)/Mail Date 6) Other:					
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#### **Non-Final Office Action**

Acknowledgement is made of the amendments filed on 5/26/05 and supplemental amendments filed on 6/15/05. Amendments are entered. Claims 1-6, 8-11, 14-18, 19, 21-26, 28-36, 38, 40-48 are pending. Claims 1-6, 14, 19, 21-26, 28-36, 38, 40-48 drawn to compounds are allowed. Claims 8-11 and 15-18 drawn to method of use are rejected. Previous rejection is withdrawn because claims are amended and arguments are found persuasive.

Instant claims are drawn to vitamin D compounds of formula (I), in claim 1, where R1 and R2 can be exocyclic methylene group, Z represents OH, R3 can be CH3, R4 can H, V is OH and W is H or together may form a double bond, and Q is straight or branched hydrocarbon which can be substituted by OH at any position.

(I) of present invention.

## The nature of the invention

# Claim Rejections - 35 USC § 112 (1st Paragraph)

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 8-11 and 15-18 are rejected under 35 U.S.C. 112, first paragraph, because the

specification, while being enabling for the certain type of cancer, does not reasonable provide

enablement for the treatment of tumor diseases, AIDS, Alzhiemer or degenerative diseases.

Examiner will explain taking the example of tumor/cance.

Factors to be considered in determining whether a disclosure meets the enablement

requirement of 35 U.S.C. 112, first paragraph, have been described in In re Colianni, 195 USPQ

150, 153 (CCPA 1977), have been clarified by the Board of Patent Appeals and Interferences in

Ex parte Forman, 230 USPQ 546 (BPAI 1986), and are summarized in In re Wands (858 F2d

731, 737, 8 USPQ2d 1400, 1404 (Fed Cir. 1988).

Among these factors are:; (2) the state of the prior art; (3) the relative skill of those in the

art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6); (7) the

presence or absence of working examples; and (8) the quantity of experimentation necessary.

When the above factors are weighed, it is the examiner's position that one skilled in the art could

not practice the invention without undue experimentation. The instant disclosure fails to meet the

enablement requirement for the following reasons:

(1) the nature of the invention

Claims 8-11 and 15-18 are drawn to method of treating

- Alzheimer's disease,
- AIDS,
- Tumor diseases,
- Precancerous stages,
- Disorders of immune diseases,

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Auto-immune disease

• Degenerative diseases of peripheral and central nervous system and many more.

The predictability or unpredictability of the art

Evidence involving a single compound and two types of cancer was not found sufficient to establish the enablement of claims directed to a method of treating seven types of cancer with members of a class of several compounds, *In re Buting*, 163 USPQ 689. The disclosure provides no indication of whether the compounds treat all cancers. To make clearer the lack of enablement for treatment of all cancer, extrinsic evidence is supplied by Draetta (Ann. Reports Med. Chem.), Draetta et al. in "Annual Reports in Medicinal Chemistry"., 1996, Academic Press, San Diego, pp 241-246, final sentence on page 246 although many still think about the need for a magic bullet as a cure for all cancers, our knowledge of the molecular mechanism underlying this disease make the prospect of developing such a universal cure very unlikely." Since no universal cure for cancer has been developed, it follows that there is no correlation between the assays relied upon by applicants and the ability to treat all cancers. Thus, those assays are not sufficient to enable such claims.

Further, in the art of clinical oncology, no compound has yet shown clinical efficacy against every type of cancer. Different agents are used for different forms of cancer and no single agent is listed as a treatment of every single type of cancer. Balasubramanian reference (Recent Developments in Cancer Cytotoxics) on page 151 first paragraph "the successful treatment of solid tumors remains a formidable challenge."

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### The breadth of the claims

Claims are broad as treatment of various disease such as AIDS, Alzheimer, and degenerative diseases are claimed, any evidence for the treatment has not been shown.

### The amount of direction or guidance presented

Applicant has provided no evidence, which incontrovertibly demonstrates that the tests set forth in the instant specification are art-recognized, reliable predictors of successful treatable, in vivo, of all cancers/tumors or AIDS or Alzheimer and other diseases.

## The quantity of experimentation necessary

Since claims are broad and there is no evidence provided by Applicants to treat tumors, AIDS, Alzheimer and other diseases as claimed, the worker of ordinary skill in the art would not be able to practice the instantly claimed method, since no description is found of an actual method wherein a cancer/tumor, AIDS, Alzheimer, degeneration in a host is treated. On page 27 the listed provides cell-differentiating activity of certain compounds in DR HL 60.

Applicants fail to fulfill the requirement of 35 U.S.C. 112, first paragraph, by failing to provide an adequate written description of how to treat all tumors and other diseases in a single host.

Enablement must be provided by the specification unless it is well known in the art. In re Buchner 18 USPQ 2d 1331 (Fed. Cir. 1991).

## Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi whose telephone number is (571) 272-0622. The examiner can normally be reached on any business day.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Gary Kunz can be reached on (571) 272-0887. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SABIHA QAZI, PH.

Saturday, September 03, 2005

PRIMARY EXAMINER